

## ABSTRACT OF THE DISCLOSURE

[162] A special bus master, called a configuration host, "walks" a bus system to discover the bus topology and bus bridges that form that topology. Once the bridges have been located, the configuration host assigns a bridge ID to each bridge and enters information into internal bridge registers that control the flow of information between bus segments. The configuration host also populates an address bitmap in each bridge in order to complete the bus system configuration. In one embodiment, the bus topology is a tree configuration and the configuration host performs a recursive procedure that configures each branch of the tree. During this configuration process the internal bridge registers and address bitmap in each bridge are populated.